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Current Trends of Application of The Activity Based Costing System Method in Hospitals; A Review

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Abstract

The purpose of this literature review is to review how the application of inpatient service rates using the Activity Based Costing system. Activity-based costing (ABC) is a method for determining actual costs. Although ABC is a relatively new innovation in cost accounting, it is quickly being adopted by companies in many industries, within governments, and other organizations. Given current practice, this paper emphasizes understanding the needs and the importance of ABC costs in the organization. The literature review method used is to analyze literature selected from several sources so that it becomes a conclusion and becomes a new idea. The results of research-based journals are the Activity Based Costing system has proven its effectiveness and efficiency which makes some hospitals that still use traditional calculations switch to using this system Because determining the rate of special inpatient services, is done by tracing activities that consume inpatient resources in the hospital and making it easier to calculate the comparison of activity details so that the level of accuracy is almost never wrong.

Keywords: Activity Based Costing, hospitalization, services, and rates

1. Introduction

The main task of the hospital is to provide treatment, treatment, and health services. In health services, hospitals earn income from the income of services and facilities provided, one of which is inpatient services, where the income for inpatient services is obtained from

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the rates to be paid by inpatient service users. Determining the rate of inpatient services is a very important decision because it can affect the profitability of a hospital (Politon, 2019).

Many hospitals in determining the price of hospitalization rates still use traditional cost accounting methods, where the system is not in accordance with the current advanced financing system. Traditional methods are less accurately used in determining inpatient rates because they only focus on presenting financial information in the form of costs incurred at the stage of patient care, while in the management of inpatient services, information is needed about the causes of costs in the form of activities. The existence of complete information about the activities that cause costs can affect the amount of hospitalization rates. The calculation of traditional methods is no longer relevant if applied today because it still does not provide a precise and accurate picture. The ABC method provides insight as to whether services provide enough value to customers and can serve as a roadmap to decide where strategic assets should be deployed. In health care, this is often based on services associated with patient care, which can be procedural or time-based. These include indirect costs, such as overhead expenses, and also direct costs associated with a given clinical or business entity, such as costs attributed to a given procedure from the expenses of the operating room.

Based on the above conditions, hospitals are required to be able to utilize technology and experts and medical personnel in the fields of health, the fields of communication, information, and transportation that support health service services so that the hospital is able to provide good health services. The use of these various technologies and experts makes the operational costs incurred by Rumah Sakti become large which will have an impact on high hospitalization rates, to control these costs, the hospital needs the right accounting system, especially the method of calculating inpatient service rates to produce accurate cost information related to the cost-of-service activities (Pelo, 2012).

So that the Activity Based Costing System is a cost planning method designed to predict the inherent weaknesses of traditional cost accounting systems (Kindangen et al., 2018). Therefore, according to (Siby et al., 2018) the Activity Based Costing system provides better cost information, management manages the business efficiently and better understands the strengths, weaknesses, and strengths of the business.

So, the purpose of this study is to find out how the implementation of the Activity Based Costing method on inpatient service rates when using the calculation of the Activity Based Costing method in hospitals. So, it is hoped that this research can be useful for hospitals, which can contribute in the form of information related to the application of the Activity Based Costing method in an effort to determine cost rates in inpatient units.

2. Methods

The use of the method in this study is Literature Review, which is a study conducted to analyze from literature selected from several sources so that it becomes a conclusion and

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becomes a new idea. The journals used in this study are journals that discuss topics with keywords, namely: System Activity Based Costing For Hospitals. The writing of an article consisting of National articles with Quantitative research.

ABC contends that this approach captures the economics of the production process more closely than traditional unit-based cost systems, thereby providing more "accurate" cost data as said by Cooper and Kaplan (1988) .

Cooper (1991) [2] further suggested that the ABC approach measures the costs of objects by first assigning resource costs to the activities performed by the organization, and then using causal cost drivers to assign activity costs to products, services, or customers that benefit from or create demand for these activities.

Similarly, Riska and Ashari (2021). calculation of sectio caesarea action rates using activity-based costing (abc) system method in anutapura palu general hospital. The purpose of this study is to calculate the amount of tariff on sectio caesareadi RSU Anutapura Palu using the Activity Based Costing method. The results showed that the tariff for Sectio Caesarea action using the Activity Based Costing method was Class III IDR 8,984,697, Class II IDR 9,493,643. Class I IDR 9,945,730, and VIP Class IDR 10,913,873. For RSU Anutapura Palu, it is recommended to use the calculation of Activity Based Costing (ABC) as a comparison in determining tariffs.

Maulida, et al (2023). Calculation of inpatient service rates with an Activity-Based Costing System approach at Dr.M. Goenawan Partowidigdo Cisurua Bogor Lung Hospital. The results showed that the inpatient service rates using the Activity Based Costing System approach provided more accurate and clear results compared to the rates used by Dr. M. Goenawan Partowidigdo Lung Hospital (RSPG) Cisarua Bogor.

Ramadhania and Meirini (2022) Implementation of Activity Based Costing System in Calculating Inpatient Service Rates at RSU Arga Husada Kediri. This study aims to help hospitals reduce cost distortions that occur due to the application of traditional accounting by applying the Activity-Based Costing (ABC) system in calculating inpatient service rates. The results showed that Arga Husada Hospital applies inpatient service rates based on traditional accounting, namely by adding fixed costs, variable costs, and semi-variable costs, then the total cost divided by the number of inpatient days.

Priyono et al (2020). Application of Activity-Based Costing on Inpatient Service Rates at RSUI Banyu Bening Boyolali in 2020. This study aims to determine how to determine the Activity Based Costing method on inpatient room service rates and compare the determination of inpatient room service rates when using hospital calculations and the Activity Based Costing method at RSUI Banyu Bening Boyolali in 2020. The results stated that the calculation with the ABC method found 6 treatment classes experiencing over-cost and 1 treatment class experiencing under cost. The underlying factor is the imposition of overhead

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costs in each product. In traditional cost accounting methods, the overhead costs in each product are centralized in one of the cost drivers.

According to Agliati (2002) the basic feature of the costing systems in a multinational enterprise can be analyzed with respect to four aspects: the structure of the industrial product cost, the methodology adopted to trace costs into the cost pools, the allocation methods followed to post costs to the reporting subjects, and the methodologies devised to support comparisons between service and support costs. Achyarsyah (2022). Evaluation of the Basic Rate Calculation Model for Inpatient Rooms Based on the Activity Based Costing Study Method at Siloam Kebon Jeruk Hospital. The results of this study show that Siloam Kebon Jeruk Hospital Jakarta conducts a cross strategy to subsidize the costs of patients who carry out activities for inpatients. For Executive Class and Suite Room, VVIP is expected to subsidize patients in Class II and Class III. Likewise, Class I patients can subsidize Class II patients. So that class III patients can be given standard rates that are more affordable for patients, while class II patients can be cheaper room rates. This illustrates that Siloam Hospital does not take advantage of Class II and Class III patients.

Sutopo (2022) Determination of Inpatient Rates Using an Activity Based Costing System (Case Study of a Hospital in Sidoarjo). The results of this study show that rates with an activity-based costing system are determined in several stages based on the activities used by each inpatient service so it is an effective and efficient calculation method for determining the total cost of the product.

Uluputty and Dewita (2021). Application of Activity-Based Costing on Hospital Service Rates (Study at Bantaeng District Hospital). The results of the study stated that using a cost-system-based activity system was appropriate to be applied because the calculation of cost rates was carried out by tracing activities that consumed inpatient resources. Activities that consume resources in the inpatient of RSUD Prof. H.M. Anwar Makkatutu, namely patient care activities, and patient service activities.

Manossoh and Wangkar (2021). Application of Activity-Based Costing on Inpatient Service Rates at the General Hospital of the Evangelical Church in Minahasa (GMIM) Radiance of Love Manado. The results of this study stated that the inpatient service rates calculated using the activity-based costing method were known to be large rates for VVIP class IDR 834,580, VIP class IDR 704,130, class I 731,042, class II 702,381, and class III IDR 700,758. With a difference in VVIP class IDR 84,580, VIP class IDR 154,130, class I IDR 401,042, class II IDR 412,381, and class III IDR 525,758.

Agustin, and Dewi (2023). Analysis of the Application of the Activity Based Costing Method in Determining Inpatient Service Rates at the Regional General Hospital of Buleleng Regency. The results of this study show that the inpatient service rate with the activity based costing method for VIP A class is IDR 1,030. 454, VIP B of IDR 2,093. 247, VIP C of Rp. 1,991. 047, class I Rp 1,009. 254, class II Rp 940,693, and class III Rp 894,562. When compared to the

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rates used by RSUD Kabupaten Buleleng, the ABC method provides greater results for class VIP A, VIP B, VIP C, Class I, Class II, Class III.

Samsul et al (2022). Review of inpatient rates at PKU Muhammadiyah Mamajang Hospital in Makassar area. The results of this review show that from the estimated use of activity-based costing techniques for VIP rooms amounted to Rp. 1,438,427, for room I Rp. 1,407,446, for room II Rp. 1,249,609 and for room III Rp. 1,093,151. The calculation of running payments using movement-based costing techniques, when compared to the strategy applied by PKU Muhammadiyah Mamajang Hospital, the price of administrative retribution can be reduced so as to provide lower results. This is because the above spending tasks for each item are unique.

3. Results

The implementation of the ABC system in hospitals is very helpful to identify and allocate costs more accurately based on actual activities occurring, especially in the application of hospitalization rates. With this system, health agencies or hospitals can easily calculate comparison details in activities and make it easier for health agencies to calculate the difference in costs allowed in system provisions. Not only that, the implementation of the ABC system can also help hospitals set service prices in accordance with the costs incurred.

From several hospitals that have implemented or implemented this Activity Based Costing system has also proven its effectiveness and efficiency which makes some hospitals that still use traditional calculations switch to choosing to use this system. Because in determining the rates of special inpatient services, it is done by tracing activities that consume inpatient resources in hospitals, so the level of accuracy is almost never wrong.

4. Discussion

From the review of the literature, it is evident that ABC can be used in every type of organization; be it an industry, finance, institution, or service sector. the following inferences as a point of discussion can be made:

- Traditional costing systems have led to strategic failures in many organizations when various costs especially the overheads, are incorrectly allocated to product lines.
- The implementation of ABC is not only in the conditions of manufacturing corporations, distribution centers, and agriculture but also in the field of services, especially in the health sector.
- Three accounting systems: Activity based costing, Time-Driven Activity Based costing, and Lean Accounting. Comparisons are made based on the three basic roles of information generated by accounting systems: financial reporting, decision-making, and operational control and improvement.

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- Activity-based (ABC) costs can significantly Contribute to global supply chain management (SCM) because it provide more accurate, detailed, and up-to-date information on all activities and Processes in healthcare organizations

5. Conclusion and Recommendation

The application of the Activity-Based Costing (ABC) Method in the hospital system, especially in setting hospitalization fee rates, provides advantages in the accuracy of determining the cost of each activity involved in patient care. So the Activity-Based Costing (ABC) method becomes an effective solution. ABC helps hospitals identify in more detail the cost of each activity, including inpatient services, enabling more transparent and fairer rate setting. By providing better cost information, ABC enables hospital management to manage the business more efficiently, understand the strengths and weaknesses of the business, and ultimately improve the quality of healthcare provided to patients. Through this research, it is expected to contribute relevant information related to the application of the ABC method in determining inpatient unit cost rates in hospitals.

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